acters of the skull. What he called incisors are canines; and the large horns are not on the frontals, but on maxiliaries. The top of the skull moreover is not convex, but concave, and the occiput is oblique, and not vertical. Prof. Marsh stated that he had described several species of this group, one of the most singular of which, *Dinoceras mirabilis*, Marsh, was represented in the Museum of Yale College by a nearly perfect skeleton, and portions of several others. In all of the species the limb bones differ considerably from those of Proboscidians, while the skull is so totally unlike anything hitherto known, that he could not refer these extinct animals to that group, and hence had proposed for their reception the order *Dinocerea*.

ON A SPECTROSCOPIC OBSERVATION OF THE AURORA OF APRIL 10, 1872.

By Persifor Frazer, Jr.

(*Read before the American Philosophical Society, April* 19, 1872.)

On the night of April 10, 1872, a very beautiful Aurora was seen from Philadelphia, spreading over 25° or 30° of the Northern Heavens.

The night was clear, and the wind was from N. W. and slightly cool. A heavy bank of cloud covered about one-sixth of the horizon to the north, and from the crest of this bank the Aurora seemed to proceed, shooting up fitfully in sprays and bundles to near the zenith, and traversing from west to east and back again with average rapidity. One detached streamer crossed the zenith from N. E. to S. W., and remained permanent in position, giving only occasional fluctuations of light.

Observations were commenced with a Browning angle measuring spectroscope, the light condensed through a 13 foot focus, 9 in. diam. lens.

The observations were made solely with reference to the green line in the Aurora, and the purpose in view was to verify or not the observations of Piazzi Smith in regard to its coincidence with the green hydro-carbon line seen at the base of every candle and illuminating gas-flame.

Four observations gave the following results :

1.	Green line of Aurora.....	92°	35′	0″
2.	" "	92°	35′	0″
3.	" "	92°	48′	0″
4.	" "	92°	20′	0″

The line became exceedingly faint during the 3d and 4th observations

so as to present great difficulties in placing the cross wires on it, but as the mean of these deviations, great as it is, is very nearly the two first recorded, I have proposed to let the late observations stand, and rate their value as 1 each, that of each of the first two being called 5.

This would give the value of this line as.....	92°	34′	49.8″
A series of careful observations in the D lines and the F line, gave as a mean of the former.....	91°	52′	30″
And for the latter.....	95°	13′	0″
The angular distance between D and F.....	3°	20′	30″

A curve was projected on the plan now generally adopted by observations on some ten lines, and by reference to this parabola, the mean length of the green line was found to be 563.

It would correspond to 66 of Roscoe or 176.88 Kirchoff. Lines in Rb, and Cs, and Ba, lie very near it, but none exactly coincides with it, nor *is there any absorption line in the Solar Spectrum which does.*

NOTICE OF PROBOSCIANS FROM THE EOCENE OF SOUTHERN WYOMING.

By Edw. D. Cope.

(*Telegram dated Black Buttes, Wyoming, August* 17, 1872, *read by the Secretary at the meeting of the American Philosophical Society, September* 20*th*, 1872.)

I have discovered in Southern Wyoming the following species: Loxolophodon, Cope. Incisor one, one canine tusk; premolars four, with one crescent and inner tubercle; molars two; size gigantic. L. *cornutus;* horns tripedral, cylindric; nasals with short convex lobes. L. *furcatus*, nasals with long spatulate lobes. L. *pressicornis*, horns compressed subacuminate.

(Signed) Edward D. Cope,
U. S. Geological Survey.

[*Note by the Secretary.*—The above telegram was so badly transmitted by the operators as to be read with difficulty, and the precise forms of the specific names could not be certified until the return of Prof. Cope from the field.]